

1 **CLAIMS**

2

3 1. One or more computer-readable media having stored thereon a
4 plurality of instructions that, when executed by one or more processors of a
5 computer, causes the one or more processors to perform acts including:

6 receiving collaborative electronic mail messages targeting one or more
7 recipients, each collaborative electronic mail message including a feedback
8 portion in which the one or more recipients can each add comments;

9 indicating, to a computing device corresponding to one or more of the
10 recipients, both the existence of the collaborative electronic mail messages and
11 when the collaborative electronic mail messages are modified; and

12 identifying, to the computing device, that the source of each collaborative
13 electronic mail message, as well as any modifications to the collaborative
14 electronic mail message, is the author of the collaborative electronic mail message.

15

16 2. One or more computer-readable media as recited in claim 1, wherein
17 the plurality of instructions further cause the one or more processors to perform
18 acts including identifying, to the computing device, the size of each collaborative
19 electronic mail message, the size of a collaborative electronic mail message
20 including all of the content of the collaborative electronic mail message.

1 3. One or more computer-readable media as recited in claim 1, wherein
2 the new collaborative electronic mail message includes an identifier of a location
3 at an application server where the content of the new collaborative electronic mail
4 message is stored.

5

6 4. One or more computer-readable media as recited in claim 1, wherein
7 the plurality of instructions further cause the one or more processors to perform
8 acts including:

9 receiving, from one of the one or more recipients, a reply to the new
10 collaborative electronic mail message; and

11 communicating the reply to one or more electronic mail servers associated
12 with recipients of the new collaborative electronic mail message.

13

14 5. One or more computer-readable media as recited in claim 1, wherein
15 the plurality of instructions further cause the one or more processors to perform
16 acts including:

17 receiving, from one of the one or more recipients, a reply to the new
18 collaborative electronic mail message;

19 communicating the reply to an electronic mail server from which the new
20 collaborative electronic mail message was received; and

21 receiving, from the electronic mail server, a modified collaborative
22 electronic mail message that incorporates the reply.

1 **6.** A method comprising:

2 receiving a request for a new collaborative mail message including an
3 identifier of a creator of the new collaborative mail message;

4 storing the content of the new collaborative mail message at an application
5 server; and

6 sending a message to each of one or more recipients of the new
7 collaborative mail message, wherein the message includes an identifier of the new
8 collaborative mail message at the application server and wherein the message
9 identifies the creator as the sender of the message.

10 **7.** A method as recited in claim 6, further comprising:

11 receiving a reply to the new collaborative mail message;

12 modifying the new collaborative mail message in accordance with the
13 reply; and

14 sending another message to each of the one or more recipients, wherein the
15 message includes an identifier of the modified collaborative mail message at the
16 application server and wherein the message identifies the creator as the sender of
17 the notification.

18
19
20 **8.** A method as recited in claim 7, wherein the identifier of the new
21 collaborative mail message and the identifier of the modified collaborative mail
22 message are the same identifier.

1 **9.** A method as recited in claim 6, wherein the identifier comprises a
2 uniform resource locator (URL).

3

4 **10.** A method as recited in claim 6, wherein the sending comprises
5 sending the message to one or more mail servers associated with the one or more
6 recipients.

7

8 **11.** A method as recited in claim 6, wherein the method is implemented
9 in an electronic mail server.

10

11 **12.** One or more computer-readable memories containing a computer
12 program that is executable by a processor to perform the method recited in claim
13 6.

14

15 **13.** A system comprising:
16 an electronic mail server to receive a new collaborative mail message;
17 another electronic mail server communicatively coupled to the electronic
18 mail server;
19 an application server, communicatively coupled to the electronic mail
20 server, to store the content of the new collaborative mail message; and
21 wherein the electronic mail server is further to forward a message including
22 an identifier of the content of the new collaborative mail message, as stored on the
23 application server, to the other electronic mail server, and wherein the message
24 identifies the creator of the new collaborative mail message as the sender of the
25 message.

1
2 **14.** A system as recited in claim 13, wherein the electronic mail server
3 is further to:

4 receive a reply to the new collaborative mail message;
5 modify the new collaborative mail message in accordance with the reply;
6 and

7 send another message to each of the one or more recipients, wherein the
8 message includes an identifier of the modified collaborative mail message at the
9 application server and wherein the message identifies the creator as the sender of
10 the notification.

11
12 **15.** A system as recited in claim 14, wherein the identifier of the new
13 collaborative mail message and the identifier of the modified collaborative mail
14 message are the same identifier.

15
16 **16.** A method comprising:
17 receiving a collaborative electronic mail message request targeting one or
18 more recipients;
19 storing the content of the collaborative electronic mail message locally; and
20 forwarding the content of the collaborative electronic mail message to one
21 or more mail servers that each correspond to one or more of the one or more
22 recipients.

1 **17.** A method as recited in claim 16, wherein the collaborative
2 electronic mail message request comprises a request for a new collaborative
3 electronic mail message.

4

5 **18.** A method as recited in claim 16, wherein the collaborative
6 electronic mail message request comprises a reply to a previous collaborative
7 electronic mail message.

8

9 **19.** A method as recited in claim 18, wherein the storing comprises
10 modifying a previously stored collaborative electronic mail message.

11

12 **20.** A method as recited in claim 16, further comprising maintaining for
13 the collaborative electronic mail message:

14 a root identifier that identifies an initial collaborative electronic mail
15 message corresponding to the collaborative electronic mail message;

16 a parent identifier that identifies a parent collaborative electronic mail
17 message corresponding to the collaborative electronic mail message; and

18 a message identifier that identifies the collaborative electronic mail
19 message.

20

21 **21.** One or more computer-readable memories containing a computer
22 program that is executable by a processor to perform the method recited in claim
23 16.

1 **22.** An electronic mail server comprising:

2 a collaborative mail storage device to maintain the content of a plurality of
3 collaborative mail messages;

4 a new request handler, coupled to the collaborative mail storage device, to
5 receive requests for new collaborative mail messages and store the content of the
6 new collaborative mail messages in the collaborative mail storage device;

7 a reply request handler, coupled to the collaborative mail storage device, to
8 receive replies to collaborative mail messages maintained in the collaborative mail
9 storage device, and to modify the stored collaborative mail messages in
10 accordance with the replies.

11

12 **23.** An electronic mail server as recited in claim 22, wherein the new
13 request handler is to receive requests for new collaborative mail messages from
14 other electronic mail servers.

15

16 **24.** An electronic mail server as recited in claim 22, wherein the reply
17 request handler is to receive replies to collaborative mail messages from other
18 electronic mail servers.

19

20 **25.** An electronic mail server as recited in claim 22, wherein the new
21 request handler is to receive, from a client device corresponding to an author of a
22 new collaborative mail message, a request for the new collaborative mail message
23 and communicate the request to one or more other electronic mail servers
24 associated with recipients of the new collaborative mail message.

1 **26.** An electronic mail server as recited in claim 22, wherein the reply
2 request handler is to receive, from a client device corresponding to a recipient of a
3 new collaborative mail message, a request to modify the new collaborative mail
4 message, and communicate the request to one or more other electronic mail
5 servers associated with other recipients of the new collaborative mail message or
6 an author of the new collaborative mail message.

7

8 **27.** A method comprising:
9 receiving a response to a collaborative electronic mail message targeting
10 one or more recipients;
11 generating a new collaborative electronic mail message by modifying a
12 stored copy of the collaborative electronic mail message; and
13 communicating the response to one or more mail servers that each
14 correspond to one or more of the one or more recipients.

15

16 **28.** A method as recited in claim 27, wherein the receiving comprises
17 receiving the response from one of the one or more mail servers and wherein the
18 communicating comprises communicating the response to the mail server from
19 which the response was received.

20

21 **29.** A method as recited in claim 27, further comprising identifying the
22 content of the response to the collaborative electronic email message and wherein
23 the communicating comprises communicating, as the response, the content of the
24 response.

1 **30.** A method as recited in claim 27, wherein the response includes both
2 the content of the collaborative electronic mail message as well as the content of
3 the response, and wherein the communicating comprises communicating the
4 response as received to the one or more mail servers.

5

6 **31.** One or more computer-readable memories containing a computer
7 program that is executable by a processor to perform the method recited in claim
8 27.

9

10 **32.** An electronic mail server comprising:
11 a collaborative electronic mail storage location to maintain the content of a
12 plurality of collaborative electronic mail messages;
13 a reply request handler, coupled to the collaborative electronic mail storage
14 location, to,
15 receive a reply to a collaborative electronic mail message maintained
16 in the collaborative electronic mail storage location,
17 modify the stored collaborative electronic mail message in
18 accordance with the reply, and
19 communicate an indication of the modifications to the stored
20 collaborative electronic mail message to one or more electronic mail
21 servers that each correspond to a recipient of the collaborative electronic
22 mail message.

1 **33.** An electronic mail server as recited in claim 32, wherein the reply
2 request handler is to receive the reply from another electronic mail server and to
3 communicate the indication of the modifications to the stored collaborative
4 electronic mail message to the other electronic mail server.

5

6 **34.** An electronic mail server as recited in claim 32, wherein the
7 indication includes only the changes to the collaborative electronic mail message
8 that are included in the reply.

9

10 **35.** A method comprising:
11 receiving, at a mail server, a response to a collaborative electronic mail
12 message;

13 entering the response as a tentative change to a copy of the collaborative
14 electronic mail message stored at the mail server;

15 communicating the response to another mail server;
16 receiving a message from the other mail server of a modification to the
17 collaborative electronic mail message, the modification being based on the
18 response; and

19 making, in response to the message, the tentative change permanent.

20

21 **36.** A method as recited in claim 35, further comprising including, in the
22 collaborative electronic mail message, an indication that the tentative change is not
23 permanent until the message from the other mail server is received.

1 **37.** A method as recited in claim 35, wherein the other mail server is a
2 home server corresponding to the collaborative electronic mail message.
3

4 **38.** One or more computer-readable memories containing a computer
5 program that is executable by a processor to perform the method recited in claim
6 35.
7

8 **39.** A method comprising:
9 receiving a new collaborative electronic mail message request targeting one
10 or more recipients;
11 indicating, to a computing device corresponding to one of the recipients,
12 the existence of the new collaborative electronic mail message; and
13 identifying, to the computing device, that the source of the new
14 collaborative electronic mail message is the author of the new collaborative
15 electronic mail message.
16

17 **40.** A method as recited in claim 39, further comprising:
18 determining a size of the new collaborative electronic mail message, the
19 size including the content of the new collaborative electronic mail message; and
20 identifying, to the computing device the size of the new collaborative
21 electronic mail message.
22
23
24
25

1 **41.** A method as recited in claim 39, further comprising:

2 wherein the new collaborative electronic mail message includes an
3 identifier of a location at an application server where the content of the new
4 collaborative electronic mail message is stored.

5

6 **42.** A method as recited in claim 39, further comprising:

7 receiving, from one of the one or more recipients, a reply to the new
8 collaborative electronic mail message; and

9 communicating the reply to one or more electronic mail servers associated
10 with recipients of the new collaborative electronic mail message.

11

12 **43.** A method as recited in claim 39, further comprising:

13 receiving, from one of the one or more recipients, a reply to the new
14 collaborative electronic mail message;

15 communicating the reply to an electronic mail server from which the new
16 collaborative electronic mail message was received; and

17 receiving, from the electronic mail server, a modified collaborative
18 electronic mail message that incorporates the reply.

19

20 **44.** One or more computer-readable memories containing a computer

21 program that is executable by a processor to perform the method recited in claim
22 39.

23
24
25

1 **45.** A computer-readable medium having stored thereon a data structure
2 comprising:

3 a distribution list field that identifies the recipients of the collaborative
4 electronic mail message;

5 a content field that includes all of the content of a collaborative electronic
6 mail message, wherein replies to the collaborative electronic mail message alter
7 the content in the content field;

8 an author field that identifies an author of the content in the content field.

9

10 **46.** A computer-readable medium as recited in claim 45, wherein the
11 data structure further comprises a root identifier that identifies an initial
12 collaborative electronic mail message corresponding to the collaborative electronic
13 mail message.

14

15 **47.** A computer-readable medium as recited in claim 45, a parent
16 identifier that identifies a parent collaborative electronic mail message
17 corresponding to the collaborative electronic mail message.

18

19 **48.** A computer-readable medium as recited in claim 45, a message
20 identifier that identifies the collaborative electronic mail message.